

ELECTRONIC DRAWING FILE NAMING CONVENTIONS INSIDE THE FIVE (5) FOOT LINE

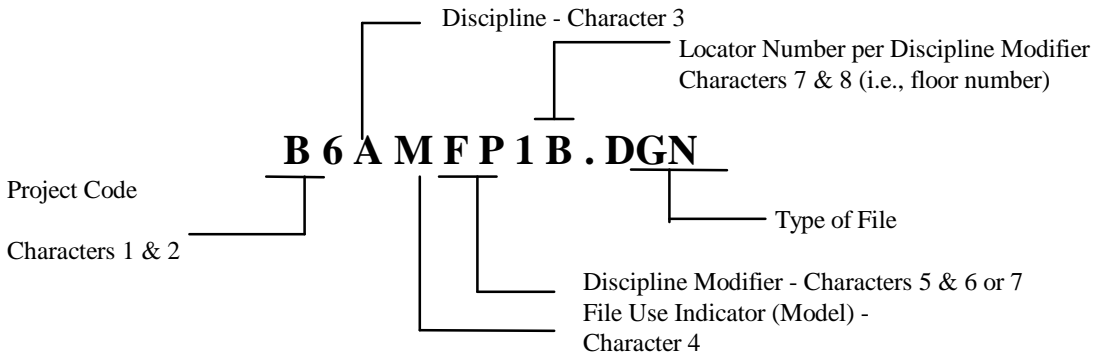
Naming conventions for electronic drawing files should allow CADD users to determine the contents of a file without actually displaying the electronic file. They also should provide a convenient and clear structure for organizing drawing files within project directories.

The naming conventions below use the 8.3 character file limitation of the DOS operating system to comply with ISO 9660. Two types of **files** are used to depict design effort files - model and plot files.

The model file format allows the designer to concentrate on their design rather than switching back and forth between CADD files. This file contains the entire theme when the building covers more than one plotted sheet (e.g., Architectural Floor Plan First Floor, Architectural Floor Plan - Existing First Floor or Architectural Floor Plan - Demolition First Floor, or Electrical First Floor Lighting Plan). These model files contain all the geometry and text required on the plans for the creation of the plotted construction documents. The model file name uses the fourth space as an alpha character **M** to indicate the use of the file. The model file is not intended to be plotted as a contract drawing . It is used, however; as a reference file to generate the plot/sheet contract files.

These five items represent the components necessary to create a model file name.

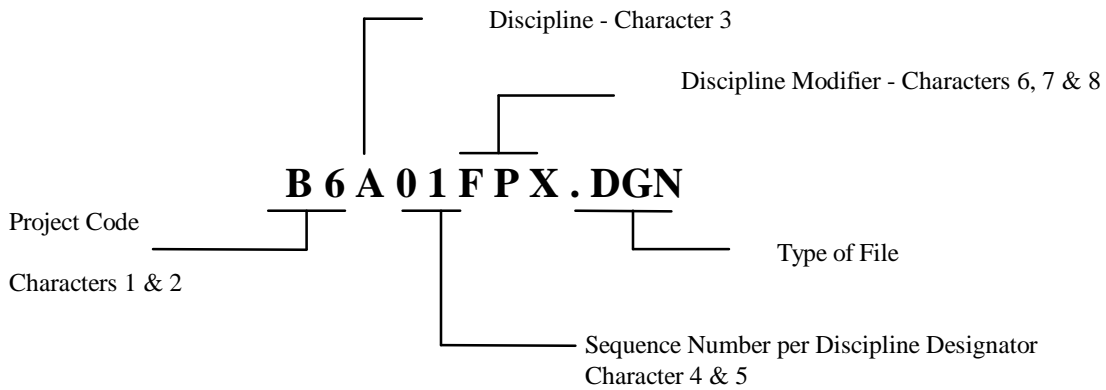
- | | |
|---|-------------------------|
| (1) the project identifier code | (Characters 1 & 2) |
| (2) the discipline designator | (Character 3) |
| (3) the file use indicator (M) | (Character 4) |
| (4) the discipline modifier | (Characters 5 & 6 or 7) |
| (5) the locator number per discipline modifier
(floor 1, 2, 3, etc.)
(basement 1b, 2b, 3b, etc.) | (Characters 7 or 8) |



The second file type is the plot /sheet file used for the construction documents and it is tied to the index of drawings for locating purposes. Pertinent items such as bar scale, subject title and notes specific to that area of the model file can be shown in this file.

These four items represent the components necessary to create a plot/sheet file name.

- | | |
|--|------------------------|
| (1) the project identifier code | (Characters 1 & 2) |
| (2) the discipline designator | (Character 3) |
| (3) the sequence number per designator
(Savannah District preference) | (Characters 4 & 5) |
| (4) the discipline modifier | (Characters 6 & 7 & 8) |



Project Identifier Code (characters 1 & 2)

Using two character combinations (a-z & 0-9), 1,296 different combinations can be generated to be used in conjunction with a table to identify the design effort. These combinations are to be used to provide uniqueness for design effort segregation. The possibility of file overwriting is greatly diminished by using the Project Identifier Code as the first two characters in the file name. A Project Identifier Code will be generated for each building and the civil drawings for each project.

Discipline Designator (character 3)

The first column of Table 1 lists the discipline designators (character 3) for file naming conventions.

Table 1

Character 3	Discipline or Discipline Theme
A	Architecture
C	Civil/Site
E	Electrical Systems
F	Fire Protection
G	General Information - Cover, Indexes, & Title Blocks
H	HTRW
I	Interiors
K	Kitchen
L	Landscape
M	Mechanical Systems
O	Geotechnical & Foundations
P	Plumbing Systems
R	Asbestos Abatement
Q	Security Systems
S	Structural Systems
T	Telecommunications
W	Environmental Sewer & Water
X	Other Disciplines
Y	Control Systems
Z	Contractor/ Shop Drawings
U	Utilities

FOR PLOT/SHEET FILES:

Sequence Number Per Discipline Designator (characters 4 & 5)

Characters 4 & 5 for plot/sheet files are to be used for the sequence numbering within a discipline. For each discipline the numbering will begin with **01** and continue to **99**. Every effort should be made to plan the discipline layout within a building or design effort. Gaps in numbering are preferred over inserted sheets requiring an additional character to offset it in the set, i.e. B6A26FPX next file B6A28FPX.

Discipline Modifiers (characters 6, 7 & 8)

This table is used for file naming for General Information file names.

The second column of Table 2 lists the discipline modifiers (characters 6, 7 & 8) for General Information file names.

Table 2

Character 3	Character 6, 7 & 8	Drawing Description
G	CS	Cover Sheet
G	CI	Cover Sheet & Index of Drawings
G	ID	Index of Drawings
G	TB	Title Block
G	BDR	Border Sheet w/ Title Block

This table is used for file naming inside the five (5) foot line for Architectural Plans.

The second column of Table 3 lists the discipline modifiers (characters 6, 7 & 8) for Architectural Plans file names.

Table 3

Character 3	Characters 6, 7 & 8	Drawing Description
A	FPX	Floor Plan - Demolition
A	FPE	Floor Plan - Existing
A	FP	Floor Plans
A	BEL	Building Elevations
A	BSC	Building Sections
A	CW	Casework
A	RP	Roof Plan
A	RCP	Reflected Ceiling Plan
A	RFS	Room Finish Schedule
A	DSH	Door Schedules
A	DDT	Door Details
A	EDT	Exterior Details
A	EFP	Enlarged Floor Plans
A	IEL	Interior Elevations
A	KP	Key Plan
A	LS	Life Safety Plan
A	MD	Miscellaneous Details
A	WDT	Window Details
A	WSC	Wall Sections
A	SDT	Stair Details
A	SSC	Stair Sections
A	DI	Dimension Plan

This table is used for file naming inside the five (5) foot line for Interior Design.

The second column of Table 4 lists the discipline modifiers (characters 6, 7 & 8) for Interior Design Plan file names.

Table 4

Character 3	Character 6, 7 & 8	Drawing Description
I	AP	Artwork Placement
I	FF	Furniture Footprint
I	DD	Design Details
I	PW	Prewire Workstation Plan
I	SD	Signage Details
I	SP	Signage Placement Plan

This table is used for file naming inside the five (5) foot line for Structural Systems.

The second column of Table 5 lists the discipline modifiers (characters 6, 7 & 8) for Structural Systems file names.

Table 5

Character 3	Character 6, 7 & 8	Drawing Description
S	FP	Foundation Plan
S	FDT	Foundation Section and Details
S	FSH	Foundation Schedules
S	FRP	Framing Plan
S	GND	General Notes and Details
S	MA	Masonry Details/Reinf. Plans
S	PT	Precast Panel Layout Plan
S	RFP	Roof Framing Plan
S	RSC	Roof Framing Sections & Details
S	SFP	Stair Framing Plans
S	TEL	Truss Elevation
S	TB	Truss Bracing Plans
S	WG	Wind Girt Elevations
S	JL	Joist Girder Load Diagrams
S	VDT	Vault Details
S	PS	Picnic Shelter

Table 6

[illegible]

This table is used for file naming inside the five (5) foot line for Plumbing Systems.

The second column of Table 7 lists the discipline modifiers (characters 6, 7 & 8) for Plumbing Systems file names.

Table 7

Character 3	Character 6, 7 & 8	Drawing Description
P	LS	Legends and Schedules
P	PX	Plumbing Plan - Demolition
P	PE	Plumbing Plan - Existing
P	PP	Plumbing Plan
P	PD	Plumbing Details
P	PS	Plumbing Schedules
P	PR	Plumbing Riser Diagrams
P	SX	Sanitary Sewer Plan - Demolition
P	SE	Sanitary Sewer Plan - Existing
P	SP	Sanitary Sewer Plan
P	SD	Sanitary Sewer Details
P	SS	Sanitary Sewer Schedules
P	SR	Sanitary Sewer Riser Diagrams

This table is used for file naming inside the five (5) foot line for Fire Protection Systems.

The second column of Table 8 lists the discipline modifiers (characters 6, 7 & 8) for Fire Protection Systems file names.

Table 8

Character 3	Character 6, 7 & 8	Drawing Description
F	LS	Legends and Schedules
F	FX	Fire Suppression Plan - Demolition
F	FE	Fire Suppression Plan - Existing
F	FS	Fire Suppression Plan

This table is used for file naming inside the five (5) foot line for Electrical Systems.

The second column of Table 9 lists the discipline modifiers (characters 6, 7 & 8) for Electrical Systems file names.

Table 9

Character 3	Characters 6, 7 & 8	Discipline Modifier (Drawing Description)
E	LNI	Legend, Notes and Index
E	LX	Lighting Plan - Demolition
E	PX	Power Plan - Demolition
E	CX	Communication Plan - Demolition
E	LP	Lighting Plan
E	PP	Power Plan
E	CP	Communication Plan
E	LPP	Lightning Protection Plan
E	PRS	Power Riser & Schedules
E	CRS	Communication Riser & Schedules
E	GN	General Notes & Details
E	PS	Panel Schedules
E	LDS	Lighting Details & Schedules
E	MDT	Miscellaneous Details

FOR MODEL FILES:

The fourth character (4) is reserved for model files. The model file could be the overall floor plan of a building by floor; or the overall electrical power plan by floor or the overall structural foundation plan, i.e., each floor represents one model file. This is the file that the designer works the design. The model file is used as a reference file for the plot/sheet file. The plot/sheet file is a snapshot of the model that provides the scale appropriate for a plot. This list represents the file names for the architectural floor plans of an entire building, (this building has a basement and five floors above grade).

The file names would be called:

B9AMFPB1.DGN *
B9AMFP01.DGN
B9AMFP02.DGN
B9AMFP03.DGN
B9AMFP04.DGN
B9AMFP05.DGN

*Note: the basement is referred to by “B#” representing below grade and how many floors below grade.

Table 10

Character 3	Character 4	Characters 5 & 6 or 7	
A	M	FP	Model Floor Plan
A	M	FPE	Model Floor Plan - Existing
A	M	FPX	Model Floor Plan - Demolition
A	M	RCP	Model Reflected Ceiling
A	M	EL	Model Elevations
A	M	RPE	Roof Plan Model - Existing
A	M	RPX	Roof Plan Model - Demolition
A	M	RP	Roof Plan Model
I	M	FF	Furniture Footprint
S	M	FP	Foundation Plan
S	M	FPE	Foundation Plan - Existing
S	M	FPX	Foundation Plan - Demolition
S	M	FR	Framing Plan
S	M	RF	Roof Framing Plan
F	M	FSP	Fire Suppression Plan
M	M	HP	HVAC Plan
M	M	HPE	HVAC Plan - Existing
M	M	HPX	HVAC Plan - Demolition
P	M	SP	Sanitary Sewer Plan
P	M	SPE	Sanitary Sewer Plan - Existing
P	M	SPX	Sanitary Sewer Plan - Demolition
P	M	PP	Plumbing Plan
P	M	PPE	Plumbing Plan - Existing
P	M	PPX	Plumbing Plan - Demolition
Y	M	EC	Controls - Existing
Y	M	CP	Control Plan
E	M	LP	Lighting Plan
E	M	LPE	Lighting Plan - Existing
E	M	LPX	Lighting Plan - Demolition
E	M	CP	Communication Plan
E	M	CPE	Communication Plan - Existing

E	M	CPX	Communication Plan - Demolition
E	M	PP	Power Plan
E	M	PPE	Power Plan - Existing
E	M	PPX	Power Plan - Demolition

ELECTRONIC DRAWING FILE NAMING CONVENTIONS OUTSIDE THE FIVE (5) FOOT LINE

The file naming convention for the model or master files outside the five (5) foot line will conform to the previous text for the first and second characters of the file name. The model used here is not a model generated as the result of an application but, is the overall map of the area of the project by theme. The TSSDS (Tri-Service Spatial Data Standard) map prefix name, when appropriate, is used to generate the next five characters in the file name. In Table 12 the most frequently used map prefixes for design projects are in bold text.

Whenever possible use the map prefix name for your file name. When not appropriate use Character 3 for the discipline (see Table 1) and Character 4 is **M** to signify “ model ” file.

The map prefix for the entity class name is the component necessary to create a model file name for designs outside the five (5) foot line of a building:

(1) the map prefix for the entity class name utilities_water_system at design effort B9 would be:

B9UTWAT .DGN

env_haz_soil_pollution	ehsoi
env_haz_solid_waste_management	ehswm
env_haz_surface_water_pollution	ehswt
env_haz_regulated_tank_manage	ehtnk
fauna_amphibia	faamp
fauna_aves	faave
fauna_crustacea	facru
fauna_habitat	fahab
fauna_insecta	fains
fauna_mammalia	famam
fauna_management	famgt
fauna_mollusca	famol
fauna_pisces	fapis
fauna_reptilia	farep
flora_bryoid	flbry
flora_epiphyte	flepi
flora_habitat	flhab
flora_herb	flhrb
flora_liana	fllia
flora_management	flmgt
flora_shrub	flshr
flora_thallophyte	flthl
flora_tree	fltre
geodetic_survey	gdsrv
geodetic_usgs	gdusg
geology_lithology	gelth
geology_subsurface	gesub
geology_surface	gesur
geology_tectonic	getec
hydrography_coastal_zone	hyczn
hydrography_floodplain	hyflp
hydrography_hydrobasin	hyhdb
hydrography_ice_and_snow	hyice
hydrography_management	hymgt
hydrography_subsurface	hysub
hydrography_surface	hysur
hydrography_wetland	hywet
improvement_athletic_recreation	imath
improvement_erosion_control	imero
improvement_flood_control	imfdc
improvement_general	imgen
improvement_machinery	immac
improvement_outdoor_recreation	imrec
improvement_wells	imwel
landform_bathymetry	lfbth
landform_hypsography	lfhyp
landform_topography	lftop
land_status_land_condition	lscnd
land_status_general	lsgen
land_status_land_management	lsmgt
military_operations_air	mlair
military_public_relations	mlpub
military_operations_security	mlsec
military_operations_safety	mlsft

military_operations_training	mltng
common_dictionary	N/A
common_general	N/A
common_media	N/A
common_metadata	N/A
cultural_general	N/A
fauna_general	N/A
flora_general	N/A
olfactory_general	olgen
soil_general	sogen
transportation_airfield_facility	trafl
transportation_air	trair
transportation_general	trgen
transportation_ports_and_harbors	trhrb
transportation_lock_system	trloc
transportation_marine	trmar
transportation_marine_navigation	trnav
transportation_pedestrian	trped
transportation_railroad	trrrd
transportation_vehicle	trveh
utilities_cntrl_mntr_system	utecm
utilities_electrical_system	utele
utilities_electrical_ext_light	utexl
utilities_fuel_system	utful
utilities_natural_gas_system	utgas
utilities_general	utgen
utilities_heat_cool_system	uthcs
utilities_industrial_system	utinw
utilities_storm_system	utsto
utilities_water_system	utwat
utilities_wastewater_system	utwwt
visual_aesthetic_view	vsaes
visual_general	vsgen

The * in this table indicates a map that is in the TSSDS.

Table 13

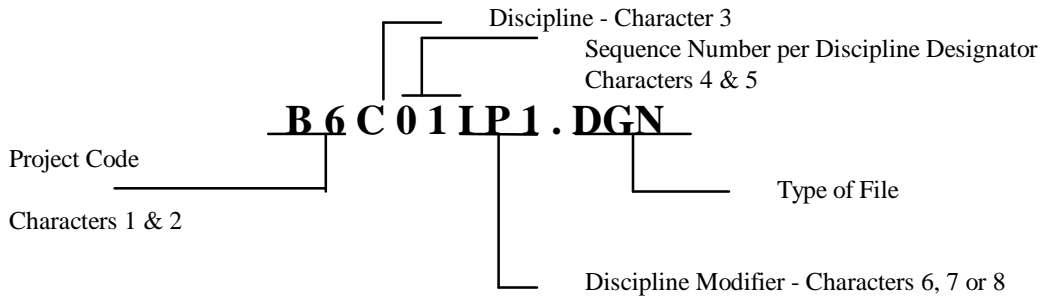
Character 3 or *4	Characters 4, 5, 6 or 7	MODEL FILES
*LF	HYP	Topographic Plan Model
C	MTX	Topographic Demolition Model
C	MLP	Layout Plan Model
C	MGP	Grading Plan Model
C	MBL	Boring Log Plan Model
C	MEC	Erosion Control Plan Model
C	MJL	Joint Layout Plan Model
C	MAS	Apron Striping Plan Model
L	MLP	Landscape Plan Model
*UT	GEN	General Utilities
*UT	INW	Industrial Distribution Plan
*UT	WAT	Water Distribution Plan

*UT	WWT	Waste Water Distribution Plan
*UT	STO	Storm System
*UT	ECM	Energy Control Plan Model
*UT	FUL	Fuel Plan Model
*UT	GAS	Gas Plan Model
*UT	HCS	High Temp & Chilled Water Model
*UT	ELE	Electrical Model
*UT	GEN	Poles and Guys Model
*UT	EXL	Exterior Lighting Model

All working files for a specific design should be included in the design effort directory. These files may have been generated using modeling techniques or other design programs that the engineer would choose to produce data to aide in the design effort. These file names shall include the first three characters listed below. These file extension types could be .ttn, .dgn, .dtm,.doc, .xls, etc.

The information below pertains to the individual plot files in a drawing set. These five items represent the components necessary to create a design file name for plots outside the five (5) foot line of a building:

- | | |
|--|-----------------------|
| (1) the project identifier code | (Character 1 & 2) |
| (2) the discipline designator | (Character 3) |
| (3) the sequence number per discipline | (Characters 4 & 5) |
| (4) the discipline modifier | (Character 6, 7 or 8) |
| (5) user defined | (Character 8) |



This table is used for plot file naming outside the five (5) foot line for Civil/Site designs.

The second column of Table 14 lists the discipline modifiers (characters 6, 7 & 8) for Civil/Site design file names.

Table 14

Character 3	Characters 6, 7 & 8	Drawing Description
C	IP	Installation Plan
C	PM	Project Location Map
C	GN	General Notes & Legends
C	TP	Topography Plan
C	TX	Demolition Plan
C	XT	Demolition & Topography Plan
C	LP	Layout Plan
C	GP	Grading Plan
C	GD	Grading & Drainage Plan
C	BL	Boring Log Plan
C	EC	Erosion Control Plan
C	SP	Staking Plan
C	DS	Storm Drainage Schedule
C	DP	Storm Drainage Profiles
C	SD	Storm Drainage Details
C	MD	Miscellaneous Site Details
C	DD	Dumpster Pad Screen Details
C	ED	Erosion Control Details
C	FD	Fence Details
C	JE	Joint Elevation Plan
C	JL	Joint Layout Plan
C	JD	Joint Details
C	PM	Pavement Marking Plan
C	PD	Pavement Details
C	AS	Apron Striping Plan
C	PP	Plan and Profile
C	CSC	Cross Sections
C	UP	Utility Plan
C	SS	Sanitary Sewer Plan
C	SP	Sanitary Sewer Profiles
C	WD	Water Details
C	SM	Sanitary Manhole Details
C	LS	Lift Station Details
C	OW	Oil Water Separator Details

This table is used for plot file naming outside the five (5) foot line for Geotechnical and Foundation designs. The second column of Table 15 lists the discipline modifiers (characters 6, 7 & 8) for Geotechnical and Foundation design file names. Some agencies do not have a separate designation for Geotechnical and Foundations. When a separate designation is not necessary, the discipline modifier can be placed with the appropriate discipline group within the agency structure, i.e. Geotechnical and Foundations may be a part of Civil Engineering or Structural.

Table 15

Character 3	Character 6, 7 & 8	Drawing Description
O	BL	Boring Locations
O	LB	Logs of Borings
O	SA	Stability Analysis
O	SP	Soil Profiles
O	TSC	Typical Sections
O	AB	Asbestos Sample Locations
O	LP	Lead Paint Sample Locations

This table is used for plot file naming outside the five (5) foot line for Landscape designs. The second column of Table 16 lists the discipline modifiers (characters 6, 7 & 8) for Landscape design file names.

Table 16

Character 3	Character 6, 7 & 8	Drawing Description
L	LP	Landscaping Plan
L	IP	Irrigation Plan
L	LDT	Landscape Details
L	ADT	Arbor Details

This table is used for plot file naming outside the five (5) foot line for Environmental Sewer and Water designs. The second column of Table 17 lists the discipline modifiers (characters 6, 7 & 8) for Environmental Sewer and Water design file names.

Table 17

Character 3	Character 6, 7 & 8	Drawing Description
W	UP	Utility Plan
W	SS	Sanitary Sewer Plan
W	SP	Sanitary Sewer Profiles
W	WDT	Water Details
W	SMD	Sanitary Manhole Details
W	LSD	Lift Station Details
W	OWD	Oil Water Separator Details

This table is used for plot file naming outside the five (5) foot line for Mechanical designs.

The second column of Table 18 lists the discipline modifiers (characters 6, 7 & 8) for Mechanical design file names.

Table 18

Character 3	Character 6, 7 & 8	Drawing Description
M	LN	Legend, Notes and Schedules
M	SX	Mechanical Site Demolition Plan
M	SP	Mechanical Site Plan
M	EP	Exterior Profiles
M	WD	CHW & LTW Distribution Plan
M	VPD	Valve Pit Details
M	STD	Shallow Trench Details
M	MD	Miscellaneous Details

This table is used for plot file naming outside the five (5) foot line for Electrical designs.

The second column of Table 19 lists the discipline modifiers (characters 6, 7 & 8 for Electrical design file names.

Table 19

Character 3	Characters 6, 7 & 8	Drawing Description
E	LNI	Legend, Notes and Index
E	SP	Electrical Site Plan
E	DA	Electrical Distribution – Aerial
E	EC	Exterior Communication Plan
E	OD	One-line Diagrams-Telephone
E	DTU	Electrical Details – Underground
E	ES	Exterior Schedules
E	EDT	Exterior Details

This table is used for plot file naming outside the five (5) foot line for HTRW designs.

The second column of Table 20 lists the discipline modifiers (characters 6, 7 & 8) for HTRW design file names.

Table 20

Character 3	Character 6, 7 & 8	Drawing Description
H	LDT	Lift Station Details
H	EDT	Evapotranspiration Bed Details
H	LFD	Leachate Field Details
H	SDT	Septic Tank Details
H	EWT	Elevated Water Tank Details
H	GDT	Ground Storage Reservoir Details
H	WB	Water Supply Building Details
H	WP	Water Treatment Plan
H	WD	Water Treatment Details
H	WT	Wastewater Treatment Plan
H	WWD	Wastewater Treatment Details
H	PP	Pollution Prevention Plan
H	DBD	Detention Basin Details
H	WLD	Water Well Details
H	GCD	Gas Collection System Details
H	SCD	Spill Containment Details
H	LCD	Leachate Collection Details
H	HP	Hydraulic Profile
H	OSD	Oil Water Separator Details
H	LFD	Landfill Liner and Cover Details

PLOT SHEET SIZES

Sheet sizes

International Paper Sizes

International Designation	width		Length		nearest US size	
	millimeter	inch	Millimeter	Inch	letter	inch
A0	841	33.11	1189	46.81	E	34.0 x 44.0
A1*	594	23.39	841	33.11	D*	22.0 x 34.0
A2	420	16.54	594	23.39	C	17.0 x 22.0
A3	297	11.69	420	16.54	B	11.0 x 17.0
A4	210	8.27	297	11.69	A	8.5 x 11.0
A5						

* PREFERRED BY DISTRICT

WORKING UNITS SEED FILES AND GLOBAL ORIGINS

METRIC SEED FILES

Three dimensional (3D) seed files shall be used throughout the design process for the following reasons: (1) many design packages (e.g. Project Architect, InRoads) require 3D files, (2) all design files can be referenced to each other without dimension compatibility problems, (3) either 2D or 3D cell libraries can be utilized (4)... Two dimensional data (e.g. floor plans, interior lighting plans) will normally be drawn at elevation zero.

Microstation seed files contain configuration parameters, including working units setup, global origin assignment, font resource files, and color table. These parameters are discussed below.

WORKING UNITS:

INSIDE THE 5' LINE:

Microstation seed files for inside the 5' line shall have the following specifications:

Model Unit name	mm
Sub Unit name	none
Model Units per Sub Units	1
Positional Units per Sub Units	10

OUTSIDE THE 5' LINE:

Microstation seed files for outside the 5' line shall have the following specifications:

Model Unit name	m
Sub Unit name	none
Model Units per Sub Units	1000
Positional Units per Sub Units	10

GLOBAL ORIGIN:

INSIDE THE 5' LINE:

The location of the global origin (the 0, 0, 0 coordinate point) shall be at the lower left corner of the X-Y design cube and centered on the Z-axis. The lower left coordinate of the drawing shall begin around the coordinate 10,000 (X-axis), 10,000 (Y-axis), and 0 (Z-axis). This allows for drawing coordinates as large 429,486,729 mm the X and Y directions. Negative X and/or Y coordinates are undesirable due to potential translation problems.

OUTSIDE THE 5' LINE:

The location of the global origin (the 0, 0, 0 coordinate point) shall be at the lower left corner of the X-Y design cube and centered on the Z-axis. This allows for drawing coordinates ranging from 0, 0, -2147433 to 4294967, 4294967, 2147433 which should be sufficient for the majority of needs.

FONTS:

The standard MicroStation default font resource library shall be used. The following fonts are used in this standard:

FONT NUMBER	NAME
1	Proportional
3	Monotext
23	Slanted
42	Outlined
43	Low Resolution Filled

COLOR TABLE

The first seven colors of the default Microstation color table (color.ctb) shall be used in this standard..

Color Number	Color
0	White (on black backgnd) / Black (wht bckgnd)
1	Blue
2	Green
3	Red
4	Yellow
5	Violet
6	Orange
7	Cyan

LINE WEIGHTS

MicroStation line weights 0 through 6 are used in this standard. The plotted line weights are as shown in the following table.

Line Weight Number	Plotted line thickness (mm)	Plotted line thickness (in)
0	0.13	0.005
1	0.25	0.010
2	0.35	0.014
3	0.50	0.020
4	0.70	0.028
5	1.00	0.039
6	2.00	0.079